

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**City of Rayne
Rayne City of - Power Plant
Rayne, Acadia Parish, Louisiana
Agency Interest Number: 9068
Activity Number: PER20070001
Proposed Permit Number: 0040-00086-V2**

I. APPLICANT

Company:

Rayne City of - Power Plant
PO Box 69
Rayne, Louisiana 70578-0069

Facility:

City of Rayne
200 Third St
Rayne, Acadia Parish, Louisiana
Approximate UTM coordinates are 570.3 kilometers East and 3343.9 kilometers North, Zone 15.

II. FACILITY AND CURRENT PERMIT STATUS

Rayne Diesel Power Plant, an existing electric generation facility which began operation prior to 1970, currently operates under Permit No. 0040-00086-V1 issued July 19, 2002.

III. PROPOSED PROJECT/PERMIT INFORMATION

Application

A permit renewal application and Emission Inventory Questionnaire were submitted by the City of Rayne on January 22, 2007 requesting a Part 70 operating permit renewal for the Rayne Diesel Power Plant. Additional information dated March 22, 2007 was also received.

Project Description

The Rayne Diesel Power Plant is an electric generation facility owned and operated by the City of Rayne in Rayne, LA. The Rayne Diesel Power Plant air emissions are due to particulate matter from dissolved solids in cooling tower drift, products of combustion of diesel fuel in internal combustion engines and vapor emissions from handling and storage of diesel fuels.

**City of Rayne
Rayne City of - Power Plant
Rayne, Acadia Parish, Louisiana
Agency Interest Number: 9068**

NO_x and CO emissions changes requested in this renewal application over those currently permitted are due entirely to the use of more recent and reliable stack test data. This renewal also provides speciation of VOC emissions not included in the previous air permit.

Proposed Permit

Permit 0040-00086-V2 will be the renewal of Part 70 operating permit 0040-00086-V0 for the City of Rayne – Diesel Power Plant.

Permitted Air Emissions

The permitted emissions for Permit No. 0040-00086-V0, issued August 19, 1997, are as follows:

Pollutant	Emissions
PM ₁₀	11.66
SO ₂	88.92
NO _x	545.85
CO	142.63
VOC *	17.63

The permitted emissions for Permit No. 0040-00086-V1, issued July 19, 2002, are as follows:

Pollutant	Emissions
PM ₁₀	5.75
SO ₂	37.04
NO _x	235.77
CO	20.98
VOC *	7.36

**City of Rayne
Rayne City of - Power Plant
Rayne, Acadia Parish, Louisiana
Agency Interest Number: 9068**

With this application, the City of Rayne Diesel Power Plant proposes to obtain a Part 70 permit renewal, as well as update emissions using the most current emission data. Estimated emissions for the facility in tons per year are as follows:

Pollutant	Emissions
PM ₁₀	7.76
SO ₂	47.68
NO _x	277.74
CO	20.10
VOC *	8.51

IV REGULATORY ANALYSIS

The applicability of the appropriate regulations is straightforward and provided in the Specific Requirements section of the proposed permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are also provided in the Specific Requirements section of the proposed permit

Applicability and Exemptions of Selected Subject Items

ID No:	Requirement	Notes
EQT 003 Unit No. 8 Diesel Engine C1	40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Steam Generating Units	DOES NOT APPLY – constructed before June 9, 1989.
	40 CFR Part 64	DOES NOT APPLY – unit does not use a control device
EQT 004 Unit No. 9 Diesel Engine C2	40 CFR 60 Subpart Dc – Standards of Performance for Small Industrial-Commercial-Steam Generating Units	DOES NOT APPLY – constructed before June 9, 1989.
	40 CFR Part 64	DOES NOT APPLY – unit does not use a control device
EQT 005	Control of Emissions of Organic Compounds [LAC 33:III.2103.A]	EXEMPT – tank vapor pressure is below 1.5 psia.

**City of Rayne
Rayne City of - Power Plant
Rayne, Acadia Parish, Louisiana
Agency Interest Number: 9068**

ID No:	Requirement	Notes
Diesel Tank T1	NSPS Subpart K – Standards of Performance for Storage Vessels for Which Construction, Reconstruction, or Modification Commences after June 11, 1973 and Prior to May 19, 1978. [40 CFR 60.110]	DOES NOT APPLY – unit has not been reconstructed or modified since June 11, 1973 and prior to May 18, 1978.
	NSPS Subpart Ka – Standards of Performance for Storage Vessels for Petroleum liquids for Which Construction, Reconstruction, or Modification Commences after May 18, 1978 and Prior to July 23, 1984. [40 CFR 60.110a]	DOES NOT APPLY – constructed before May 18, 1978.
EQT 005 Diesel Tank T1	NSPS Subpart Kb – Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984. [40 CFR 60.110b]	DOES NOT APPLY – constructed before July 23, 1984.

Prevention of Significant Deterioration/Nonattainment Review

This permit was reviewed for compliance with 40 CFR 70 and the Louisiana Air Quality Regulation. Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP) do not apply.

Streamlined Equipment Leak Monitoring Program

Unit or Plant Site	Program Being Streamlined	Stream Applicability	Overall Most Stringent Program
City of Rayne Diesel Power Plant	None	-	-

MACT Requirements

The facility is not a major source of Toxic Air Pollutants pursuant to LAC 33:III.Chapter 51.

Air Quality Analysis

Dispersion Model(s) Used: None

**City of Rayne
Rayne City of - Power Plant
Rayne, Acadia Parish, Louisiana
Agency Interest Number: 9068**

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to the Section VIII – General Condition XVII Activities of the proposed permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to the Section IX – Insignificant Activities of the proposed permit.

V. PERMIT SHIELD

There is no permit shield requested in this permit action.

VI. PERIODIC MONITORING

Stack testing at an approved frequency (see proposed permit) is required for the two diesel engines (EQT Nos. 8 & 9) due to the power output (5743 hp) and hours of operation (3000 hours) of the engines.

Federal regulation 40 CFR 64 – Compliance Assurance Monitoring is not applicable to this facility.

**City of Rayne
Rayne City of - Power Plant
Rayne, Acadia Parish, Louisiana
Agency Interest Number: 9068**

VII. GLOSSARY

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Maximum Achievable Control Technology (MACT) – The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

Hydrogen Sulfide (H₂S) – A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the reaction of acids on metallic sulfides, and is an important chemical reagent.

New Source Review (NSR) – A preconstruction review and permitting program applicable to new or modified major stationary sources of air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nitrogen Oxides (NO_x) – Compounds whose molecules consist of nitrogen and oxygen.

Organic Compound – Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit – Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀ – Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

**City of Rayne
Rayne City of - Power Plant
Rayne, Acadia Parish, Louisiana
Agency Interest Number: 9068**

Sulfur Dioxide (SO₂) – An oxide of sulfur.

Sulfuric Acid (H₂SO₄) – A highly corrosive, dense oily liquid. It is a regulated toxic air pollutant under LAC 33:III.Chapter 51.

Title V Permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) – Any organic compound, which participates in atmospheric photochemical reactions; that is, any organic compound other than those, which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.

COMPLIANCE SOLUTIONS

CSG
GROUP

11628 South Choctaw Dr., Suite 233
Baton Rouge, LA 70815

COPY

original to LOA

copy to MF/Corp/R Inc.

DEQ - DES

2007 MAY 16 PM 2:50

May 14, 2007

Certified Mail: 7005 1160 0002 6930 5962

Louisiana Department of Environmental Quality
Air Permit Division
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

**RE: Payment for Minor Modification
Title V Operating Air Permit
Permit No. 0400-00086-V1
Rayne Diesel Power Plant
City of Rayne, Louisiana
Agency Interest # 9068**

As directed by the Air Permitting staff, enclosed please find a check in the amount of \$1712.00. The check is in payment for a minor modification (i.e., renewal) for the Part 70 Operating Permit for the Rayne Diesel Power Plant located in Rayne, Louisiana.

Please call me at 225-275-5131 if you have any questions.

Sincerely,

Compliance Solutions Group



Philip B. Curwick, PE
Vice President

Encl: Check from the City of Rayne to the LDEQ